STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

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Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

April 1, 1983

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REGISTERED RETURN RECEIPT REQUESTED

Mr. Lloyd Wall, President
Kolt Mining Company
948 East 7145 South, Suite #102
Midvale, Utah 84047

RE: Conditional Tentative Approval
Kolt Mining Company
Milford Project
ACT/001/006
Beaver County, Utah

Dear Mr. Wall:

On March 24, 1983, the Board of Oil, Gas and Mining concurred with the Division's decision to issue a conditional tentative approval for the proposed Milford Project. Due to certain deficiencies which have not yet been addressed and resolved between Kolt Mining and the Division, final review of the mining and reclamation plan was not completed prior to the Board Hearing in March. Rather than hold up the placement of a public notice for the project, a conditional tentative approval is issued. The following concerns and conditions have been attached to this approval, and contingent upon Kolt Mining meeting said conditions and the Division receiving no substantial adverse public comment, a final approval may be issued.

General

Rule M-3 (1)(g)

The applicant must submit a soils map showing the approximate depth of soils for each series in the area of disturbance and the location of the sample points taken for each series. This was originally requested in our November 23, 1982 review letter.

Rule M-3 (2)(e)

Please refer to our review comments of November 23, 1982. The applicant has not addressed the questions and must commit to the following before final approval.

1. Determination of actual seed mixes will be deferred until the results of test plots have been analyzed and submitted to DOGM. As in our original comments it is advised that the seed mixes for such test plots be revised to include more of the native plant species.

2. The revegetation plan for final reclamation must be submitted to DOGM for approval at least sixty (60) days prior to any final reclamation.

Other concerns which need to be addressed are the protection of the reclaimed areas from grazing, the problem of what the alfalfa will be innoculated with and the problem of the seed mixes not adding to the 18 1/2 pounds per acres as stated.

Rule M-10 (7)

The applicant must commit to breaking up and removing of foundations or burial under topsoil to a depth sufficient to support revegetation. If the foundations are to be removed what will the disposition be?

Rule M-10(12)(2)(a)

A specific revegetation success standard must be determined. Cover values given in Table 2.2-3 should be correlated with the various seed mixes proposed for revegetation. Since it appears that the majority of the area disturbed will be pinyon-juniper habitat, one success standard would probably be acceptable. However, unless pinyon-juniper will be replanted, it is unlikely that 55 percent vegetation cover can be reestablished. A success standard of 15-20 percent is probably achievable.

Table 2.2-3 is not clear. Percentages of vegetative cover, litter, rock and bare ground should add up to 100 percent. Please submit a revised table.

Soils

The information provided on maps submitted by Kolt Mining at the February 23, 1983 meeting do not provide the narrative and discussion of the concerns raised in our review letter of November 23, 1982. These concerns must be addressed and resolved prior to the Division issuing final approval. Please feel free to contact Tom Portle of the Division staff on any problems you may have with this section.

To reiterate our concerns:

Rule M-10(14)
M-3(1)(f)

The permit application is lacking in that insufficient information is provided to allow for the development of criteria for topsoil and subsoil salvage operations as well as volumes required to effect reclamation. The

applicant makes statements on page 2-39 such as "soils suitable for reclamation" but has advanced no criteria for making such a determination. This concern is amplified by statements such as "should areas go wanting for topsoil." Approximate volumes required for reclamation and anticipated retrievable volume should be ascertained in advance. (Please refer to the enclosed soil tabulation chart.)

Soil data provided in the application are inadequate as a base to make logical planning designs. For example, the applicant indicates on page 2-38 that soils present in the "waste rock dump area" will not support vegetation and implies that this material will not be salvaged. This must be documented by providing soil chemical analysis. Please provide more baseline soils data. Data should include, but not be limited to, soil texture, pH, electrical conductivity, sodium absorption ratio, boron, iron, lead, molybdenum, selenium, zinc, available nitrogen, phosphorous and potassium, soluble calcium, magnesium and sodium. Sampling should be performed by depth. This information will assist in formulating plans for proper handling of soil materials.

Further, it does not necessarily follow that areas such as the waste rock dump area (page 2-38) should not have benefit of topsoil replacement. This is presumably justified by a lack of plant growth supporting material. The basis for this assumption is not readily evident. From the soils map presented, it appears that nearly 65 percent of the soils located on the permit area are Blackett Series which are described as deep with a nine inch sandy loam upper horizon. Also, the Sheeprock Series can be a source of materials especially in areas where thick zones present themselves.

On page 2-39, the applicant makes a statement "when a high potential for vegetative success is observed on dump material." What is the nature of the material in question? What reason is there to believe it will or will not be useful? Please clarify.

Also, on page 2-39, the applicant indicates that subsoil will not be removed from the tailings pond area. Please provide rationale for this including physical and chemical analysis as described above.

Soil Protection: What measures will be employed to achieve adequate topsoil stockpile protection? Will drainage be diverted away from piles? Will berms be used to retain soil? Will terraces be employed on soil stockpiles? Will mulching be utilized or will other surface stabilizing agents or measures be used? Will seed be covered with soil?

Please provide a discussion regarding the specifics of preventing "traffic" on soil stockpiles during their storage life. Also, please provide a map depicting all topsoil storage locations as well as volumes of soil in each location. Please relate this to the sequence of development in such a way to assure that the soils stored in a given location will not be redisturbed prior to final reclamation.

The above-mentioned map should include details showing how drainages will be routed away from storage sites, etc. What is the anticipated final storage depth at each topsoil storage area? What will be the probable dimension of each stockpile? What will the outslopes of the stockpiles be? Will the stockpiles be conical, flat or concave?

Soil Redistribution: Please indicate all areas which will receive topsoil, providing specific information as to the depth of replacement. Will the waste rock dumping area receive topsoil at the time of reclamation? The operator states that in areas such as roads and diversions, topsoil will be bladed to the side and seeded. If diversions are to be left in place, this may be acceptable. However, why would soils stored adjacent to roads not be reapplied to facilitate reclamation?

The applicant must specify the season of the year during which soil redistribution will occur.

Hydrology

Concerns brought out in the Division's letter of December 10, 1982 which have not been addressed by the applicant are as follows:

Rule M-10(8)

Plans will be needed that show the locations and type of energy dissipators and riprap to be used where runoff velocities exceed five feet per second.

The applicant will have to illustrate that there will be no contamination of ground waters due to seepage of refining reagents into the subsurface.

Plans are needed that show the capacities of the sedimentation pond along with calculations and longitudinal cross-sections. Also delineate what type of liner will be used.

The applicant is reminded of the requirement that the State Engineer's Office and the Department of Health, Bureau of Water Pollution Control must issue construction permits for those impoundment facilities prior to issuance of a permit from this Division. Copies of these should be submitted to the Division.

Tailings Facility

In discussions with BLM officials it has been determined that the preferred handling of the impoundment dam is to reclaim the area to as near the original contours as possible. The overall reclamation and bond proposals should include such reclamation. If at the time of abandonment all regulatory agencies involved and the BLM are in agreement with leaving the pond intact, such modifications as necessary can be submitted to the Division for approval.

The Division has been informed by the BLM office in Cedar City that an agreement has been reached between Kolt Mining and the BLM, to relocate the tailings dam out of the drainage. Please submit any design changes as necessitated by this move.

To reiterate, the above concerns and conditions must be resolved before final approval will be given for this project. The following stipulations are a condition of final approval but will not preclude its being given. The Division requests that these stipulations be answered within 90 days of the receipt of this letter.

STIPULATIONS

Stipulation 3-17-83-1 SL/TP

Rule M-10 (6)

To reiterate our concerns on the trace minerals affects on deep rooted vegetation, what is the chemical nature of the overburden?

Will waste rock/overburden generated in this operation be analyzed for toxicity? What tests will be performed?

Stipulation 3-17-83-2 SL

Rule M-10 (12)

Applicant must supply what is considered the "appropriate" seed mix on the "outboard surface" of the dam as stated on 2-46 of the MRP.

Stipulation 3-17-83-3 SL

Rule M-10 (12)(2)(b)

Monitoring of revegetated areas during the bond release period should be discussed. This includes monitoring methods, timing and duration of monitoring and method of determining whether or not the success standard has been achieved. Funds for a minimum of three years of monitoring should be included in surety calculations.

Stipulation 3-17-83-4 SL

Rule M-10 (12)(3)

The Division will make recommendations for test plots for both overburden and topsoil media, as requested at the February 23, 1983 meeting, when the applicant has provided more baseline soils and vegetation information, as requested elsewhere in this document. The applicant still needs to discuss and/or commit to the following items.

1. How will test plot success be monitored? Will test plots be used to determine species selection as well as fertilization techniques? Will test plots for both overburden and topsoil be set up? At least two to three growing seasons will be needed to determine test plot success. No final reclamation should be done until test plot results can be evaluated and used in determining a final reclamation plan.

2. A specific schedule for and description of the various components of the wildlife monitoring plan should be submitted to the Division.

3. Map 2.2-6 as referenced on page 2-18 was not included in the plan.

Stipulation 3-30-83-5 CY

The Board expressed concern about the ultimate disposal of toxic reagents such as sodium cyanide. Is there a cyanide killing process or will the remaining toxic materials be hauled from the site at final abandonment. Please address this problem in more detail.

Concerning the reclamation surety, Mr. Ron Daniels, Deputy Director of the Division, reviewed with the Board of Oil, Gas and Mining the amount and form of surety which is acceptable to meet Division standards. The amount of the surety as presented to you in our letter of March 23, 1983 has been approved by the Board. It has been determined that the form of the surety shall be a highly liquid asset such as a bond or a certificate of deposit. These details should be worked out with Pam Grubaugh-Littig of the Division so that the plan can be presented to the Board in April for final approval.

If you have any questions, please don't hesitate to contact me or Cy Young of my staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/CY:btb

cc: C. Young, DOGM
P. Grubaugh-Littig, DOGM